PATENT

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APPENDIX

## Amendments to the Claims

We propose amending Claims 17 and 19, as follows:

- 1. (Previously Presented) A network verification tool (NVT) apparatus, comprising:
  - a network under test;
  - a plurality of probe network devices coupled to the network under test, each one probe network device configured to host at least one associated task type; and
  - an NVT server coupled to the plurality of probe network devices, wherein
    the NVT server is configured to translate parameters for a plurality of
    tasks entered by a user to instructions executable by the plurality of
    probe network devices, wherein
    each task of the plurality of tasks has a corresponding task type,
    a first task subset of the plurality of tasks comprises parameters for
    tasks to configure the network under test to emulate a
    network having a greater number of network devices than
    the number of network devices comprising the network
    under test.
    - a second task subset of the plurality of tasks comprises parameters
      for tasks to configure corresponding probe network devices
      to analyze conditions of the emulated network, and
      a profile comprises the first and second task subsets,
    - the NVT server is configured to transmit the profile to the network under
      test by further being configured to transmit the instructions to each
      probe network device hosting the associated task type, and
      each probe network device is configured to execute a process
      corresponding to the at least one associated task type in response to

- 2 -

Serial No.: 09/370,724

the instructions.

- 2. (Previously Presented) The apparatus of claim 1 further comprising:
- an NVT client coupled to the NVT server, wherein
  - the NVT client is configured to provide a template to the user for entering the parameters, and

the NVT client is configured to transmit the parameters to the NVT server.

- (Original) The apparatus of claim 1, wherein the NVT server is coupled through an Ethernet control network and a communication server to the at least one probe network device.
- 4. (Original) The apparatus of claim 1, wherein the at least one task type includes at least one of a traffic generator, a traffic analyzer, a large network emulator, a session emulator, a device query or a script task type.
- 5. (Original) The apparatus of claim 4, wherein the traffic generator is compatible with at least one combination of a protocol, a media and an encapsulation, wherein

the protocol is selected from the group consisting of IP, IPX, CLNS, Decnet, XNS, AppleTalk, VINES, TCP, UDP, ICMP, and IGMP;

the media is selected from the group consisting of Ethernet, FDDI, Serial and Token Ring; and

the encapsulation is selected from the group consisting of ARPA, SNAP, SAP, Novell-Ether and HDLC.

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6. (Original) The apparatus of Claim 4, wherein the session emulator task type is selected from the group consisting of a multi-protocol session emulator, a LLC2 single protocol session emulator, and a SDLC single protocol session emulator.

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- 7. (Original) The apparatus of Claim 4, wherein the large network emulator task type is selected from the group consisting of a BGP large network emulator, a EIGRP large network emulator, an IP RIP large network emulator, an IPX RIP large network emulator and an OSPF large network emulator.
- 8. (Original) The apparatus of Claim 4, wherein the device query task type is selected from the group consisting of a query CPU, a query memory, a query IP route, a query BGP task, a query EIGRP task, a query OSPF task, a query multi-protocol session task, a query LLC2 single-protocol session task, a query SDLC single-protocol session task, and a query traffic analyzer task.
  - 9. (Previously Presented) A method of testing a network, comprising: providing a test network comprising a plurality of probe network devices each hosting a corresponding task type and further comprising a network under test coupled to the probe network devices; providing a NVT server coupled to the probe network devices;

wherein

each of the plurality of tasks has a corresponding task type,

entering the parameters for a plurality of tasks into corresponding templates,

- a first task subset of the plurality of tasks comprises parameters for tasks to configure the network under test to emulate a network having a greater number of network devices than the number of network devices comprising the network under test,
- a second task subset of the plurality of tasks comprises parameters for tasks to configure corresponding probe network devices to analyze conditions of the emulated network, and a profile comprises the first and second task subsets;

- translating the parameters into instructions executable by the probe network device corresponding to the associated task type, wherein said translating is performed using the NVT server;
- transferring the instructions to each probe network device corresponding to the associated tasks;
- executing the profile in the network under test by executing the task types associated with the instructions on each probe network device corresponding to the associated tasks in order to form a process on the probe network device; and
- monitoring the network under test in order to determine performance, wherein said monitoring is performed using the processes on the probe network devices associated with the second task subset.
- 10. (Previously Presented) The method of Claim 9, wherein entering the parameters for a task of the task type includes

coupling an NVT client to the NVT server,

- transmitting a collection of templates corresponding to the task type to the NVT client,
- entering parameters into at least one of the collection of templates to form the task, and

transmitting the task to the NVT server.

- 11. (Previously Presented) The method of claim 9, wherein the task type includes at least one of a traffic generator, a traffic analyzer, a large network emulator, a session emulator, a device query or a script task type.
- 12. (Previously Presented) The method of claim 11, wherein the traffic generator is compatible with at least one combination of a protocol, a media and an encapsulation, wherein

the protocol is selected from the group consisting of IP, IPX, CLNS, Decnet, XNS, AppleTalk, VINES, TCP, UDP, ICMP, and IGMP;

the media is selected from the group consisting of Ethernet, FDDI, Serial and Token Ring; and

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the encapsulation is selected from the group consisting of ARPA, SNAP, SAP, Novell-Ether and HDLC.

- 13. (Previously Presented) The method of Claim 11, wherein the session emulator task type is selected from the group consisting of a multi-protocol session emulator, a LLC2 single protocol session emulator, and a SDLC single protocol session emulator.
- 14. (Previously Presented) The method of Claim 11, wherein the large network emulator task type is selected from the group consisting of a BGP large network emulator, a EIGRP large network emulator, an IP RIP large network emulator, an IPX RIP large network emulator and an OSPF large network emulator.
- 15. (Previously Presented) The method of Claim 11, wherein the device query task type is selected from the group consisting of a query CPU, a query memory, a query IP route, a query BGP task, a query EIGRP task, a query OSPF task, a query multiprotocol session task, a query LLC2 single-protocol session task, a query SDLC singleprotocol session task, and a query traffic analyzer task.
- 16. (Previously Presented) The method of Claim 11, wherein the NVT client and the NVT server are coupled through the Internet and the collection of templates and the task are transmitted using JAVA/HTML processes.

17. (Currently Amended) A network testing method performed on a test network having at least one network device coupled to an NVT server, the method comprising:

forming a profile comprising a plurality of tasks, the plurality of tasks further comprising a first task subset and a second task subset;

forming each task, each task being formed by entering task parameters into a corresponding task template, wherein

the first task subset comprises parameters for tasks to configure a network under test to emulate a network having a greater number of network devices than the number of network devices comprising the network under test, and

the second task subset comprises parameters for tasks to configure corresponding probe network devices to analyze conditions of the emulated network; and

translating the task parameters using the NVT server to form executable instructions for that ean-be-executed by a plurality of probe network devices, each corresponding to a task of the plurality of tasks, and hosting a corresponding task code, wherein

the task codes execute the executable instructions: and

transferring the executable instructions to each corresponding probe network device, wherein the corresponding probe network device executes the executable instructions using the task code hosted on the probe network device.

- 18. (Previously Presented) The method of Claim 17, wherein the task is selected from a group of tasks consisting of a traffic generator, a traffic analyzer, a large network emulator, a session emulator, a device query or a script task.
- 19. (Currently Amended) A network verification test apparatus[[,]] comprising: computer instructions implemented on an NVT server for

## an NVT server processor; and

## a memory coupled to the NVT server processor, wherein the memory stores instructions, executable on the NVT server processor, for

forming a profile comprising a plurality of tasks, the plurality of tasks further comprising a first task subset and a second task subset, wherein said forming the profile comprises:

> sending task templates to a user, wherein each task template corresponds to a task of the plurality of tasks;

receiving tasks formed by the user entering parameters into the task templates, wherein

> the first task subset comprises parameters for tasks to configure a network under test to emulate a network having a greater number of network devices than the number of network devices comprising the network under test, and

the second task subset comprises parameters for tasks to configure corresponding probe network devices to analyze conditions of the emulated network;

translating the tasks to task code configured to be executed by one or more probe network devices; and

transmitting the task code to the one or more probe network devices.

- 20. (Original) The apparatus of Claim 19, wherein the task templates correspond to task types, the task types chosen from a group consisting of a traffic generator, a traffic analyzer, a large network emulator, a session emulator, a device query or a script task.
- 21. (Previously Presented) The apparatus of Claim 2 wherein the NVT server is configured to transmit a collection of templates to the NVT client, wherein the collection of templates comprises a corresponding template for each of the at least one task types, and further comprises the template.